



DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P. O. BOX 4970
JACKSONVILLE, FLORIDA 32232-0019

REPLY TO
ATTENTION OF

FINDING OF NO SIGNIFICANT IMPACT
MILL COVE CIRCULATION CHANNEL

I have reviewed the planning document and the Environmental Assessment (EA) for the proposed action. This finding incorporates by reference all discussions and conclusions contained in the Environmental Assessment attached hereto. Based on information analyzed in the EA, reflecting pertinent information obtained from cooperating Federal agencies having jurisdiction by law and/or special expertise, I conclude that the proposed action will have no significant impact on the quality of the human environment. Reasons for this conclusion are, in summary:

- a. There will be no significant impact on threatened or endangered species or sites of cultural or historic significance.
- b. The circulation channel will be made a slow speed zone and posted with adequate signage.
- c. Water quality standards will be met.
- d. Measures to eliminate, reduce or avoid potential adverse impacts to fish and wildlife resources will be implemented during project construction.

In consideration of the information summarized, I find that the proposed action will not significantly affect the human environment and does not require an Environmental Impact Statement.

27 APR 01
Date

for *CP Brunel LTC, EV*
JAMES G. MAY
Colonel, U.S. Army
District Engineer
Christopher P. Boruch
Lieutenant Colonel, U.S. Army
Deputy District Engineer

**ENVIRONMENTAL ASSESSMENT
MILL COVE CIRCULATION CHANNEL
JACKSONVILLE HARBOR, DUVAL COUNTY, FLORIDA**

1.0. Need For the Proposed Action. The Jacksonville District, Corps of Engineers, has been requested to conduct a study of flow and siltation problems in the Mill Cove area. Concern that the diking of Back River (Figure 1) during the construction of the Dames Point- Fulton Cutoff (Figure 2) reduced flow sufficiently in the old river channel (now Mill Cove) to cause serious shoaling and circulation problems.

1.1. A primary cause of the shoaling in Mill Cove occurred after construction of the Dames Point - Fulton Cutoff channel in 1950 - 1951 (Figure 2). The Dames Point-Fulton Cutoff is located to the northeast of Mill Cove and diverts the primary flow of the river away from one of its original flow areas through Mill Cove. The *Jacksonville Harbor (Mill Cove) Feasibility Report* Volume 1 of 2 dated May 15, 1981, in appendix 1, page C-3, indicates that "From 1934 to 1977 shoaling computations indicated a major problem. The most significant factor influencing that problem had to be the construction of the Dames Point -Fulton Cutoff in 1950 - 1951." Other changes to the configuration of the St. Johns River included in the Appendix 8, Final Environmental Impact Statement, of the May 15, 1981, report note that "Federal diking and filling around Dames Point and eastward to Fulton started about 1892 to improve flow and reduce shoaling along the main ship channel. From 1855 to 1894 the initial construction of training walls and cutoff dams had very little apparent impact on shoaling along the main ship channel. From 1894 to 1977 shoaling in the main channel began to worsen with depths becoming increasingly shallow. The most significant design change that occurred in the Jacksonville Harbor project during that period was the construction of the Dames Point- Fulton Cutoff. That construction changed the topography as well as the flow and circulation patterns between Fulton and Reddie Point. With construction of the cutoff in 1950-1951, Mill Cove essentially increased in area from about 1.8 square miles to about 6 square miles. Quarantine (now Bartram) Island, through the process of harbor construction and disposal of dredged material, went from a small island east of Dames Point to a 4-mile-long island south of that point. The flow in the old river between Reddie Point along the southern shoreline to Reed Island ceased to be a through flow with the

old river channel. The major exchange of water in the western two-thirds of the enlarged area now occurs from the western end with a smaller exchange occurring in the eastern third through the weir (Figure 3). The reduction of flow was a major contributing cause of shoaling, which occurred between 1934 and 1977 in that area. In 1974 work began on the Jacksonville Harbor 38-foot dredging project around the western end of Mill Cove. As part of the project, a dike was constructed in open water adjacent to the western end of Quarantine (Bartram) Island as a means of enlarging the island for disposal. The dredging and disposal activity around the western end of Mill Cove was the main source of shoaling material in Mill Cove during the period 1974-1977. Local interests were very vocal about the severe reductions in depth that further restricted navigation and circulation during that time.

1.2. A May 1981 study of Mill Cove recommended two diversion features with widening connected by a channel 6 feet deep by 80 feet wide (Plate 1). At that time, as directed by the Board of Engineers for Rivers and Harbors (BERH), a former review agency within the Corps of Engineers, only the flow diversion features were constructed. BERH recommended monitoring of the impact of the diversion features of the cove area before undertaking the 6-foot by 80-foot channel.

1.3. Congress authorized construction of the two flow diversion features with widening (Plates 2 and 3) in the Water Resources Development Act of 1986 along with areas of marsh development to mitigate for marsh areas lost during construction. Construction started in January 1988 and completed in August of 1988.

1.4. Monitoring of the impact of the flow diversion features on Mill Cove started with hydrographic surveys of the area in February 1988. The hydrographic surveying continued about every six months through August 1993. The **Jacksonville Harbor (Mill Cove), Florida Monitoring Report** dated May 1994, pages 6-7, indicates that several areas of the cove are noticeably deeper with movement of material in those areas. Some channelization appeared in areas not originally anticipated. The surveys indicate channelization starting to occur but not totally connecting each area of the cove.

1.5. The proposed 6-foot deep by 80-foot wide pilot channel (Figure 4) located along the southern part of Mill Cove represents part of the recommendation of the May 1981 study of Mill Cove. The configuration and location of the channel closely approximates the old Back River channel shown in figure

1. As shown in that figure, the old Back River channel through Mill Cove from Reed Island to Reddie Point did tend to follow the cove's southern shoreline which supports selection of that location. Additional hydrographic survey monitoring after construction of the two flow diversion features and enlarged openings at the east and west ends of Mill Cove (plate 1) in 1988 indicated improvements in depths along the location of the old Back River channel or along the southern shoreline of Mill Cove. The monitoring results (*The Jacksonville Harbor (Mill Cove), Florida Monitoring Report* dated May 1994) also support locating the flow improvement channel in that general location.

1.6. Following the monitoring report, section 317 of the Water Resources Development Act of 1996 (WRDA 96) modified the project for navigation, Jacksonville Harbor (Mill Cove), Florida, to direct the Secretary to carry out a project for mitigation, consisting of measures for flow and circulation improvement within Mill Cove, at an estimated total Federal cost of \$2,000,000 (Public Law 104-303, October 12, 1996. Section 317. Jacksonville Harbor (Mill Cove), Florida.). No work may be undertaken until funds are appropriated for that purpose (CECW-PE MEMORANDUM FOR Commander, South Atlantic Division, ATTN: CESAD-ET-PL. SUBJECT: Implementation of Section 317 of Water Resources Development Act of 1996 (WRDA 96) - Jacksonville Harbor (Mill Cove), Florida.). WRDA 1996 provided authorization of the current flow improvement channel (Figure 4).

1.7. The authority and purpose of the Mill Cove Circulation channel is to carry out a project for mitigation, consisting of measures for flow and circulation improvement within Mill Cove. Section 317 of the Water Resources Development Act of 1996 (WRDA 96) modified the project for navigation, Jacksonville Harbor (Mill Cove), Florida, to direct the Secretary to carry out a project for mitigation, consisting of measures for flow and circulation within Mill Cove. In other words, WRDA 96 modified the Jacksonville Harbor Federal navigation project to include, as mitigation for the Mill Cove shoaling and circulation problems caused by the Federal navigation project, a flow and circulation improvement project. The flow and circulation improvement project channel will not be marked for navigation and will be allowed to meander.

1.8. Selection of dredging equipment will be determined by the contractor. The most likely choice will be a hydraulic pipeline dredge pumping the dredged material to the upland disposal area on the west end of Bartram Island. No modifications to the proposed disposal area will be needed to accommodate the

anticipated volume of dredged material. The length of the construction period is estimated to be six months.

2.0. Alternatives. According to the **Jacksonville Harbor (Mill Cove) Feasibility Report Improvement for Circulation Flow and Navigation Volume 1 of 2** dated 15 May 1981, pages 14-15, initially 30 flow improvement plans received consideration with physical model testing at the Waterways Experiment Station (WES). Model test results reduced that number to 20, then 6, and with other environmental, socio-economic considerations to three plans before reaching the selected plan.

2.1. The report states that, "In considering public concerns in the Mill Cove area, the advice of the Tidal Hydraulics Committee was requested in determining alternative approaches which would likely yield a feasible solution to the silting problem in Mill Cove. The Committee indicated that Mill Cove was acting as a sediment trap and that a model investigation should be made to consider possible solutions. Waterways experiment Station personnel constructed the model, and consultation with them enabled the formulation of a preliminary array of alternatives for initial consideration.

2.2. During the formulation of plans to reduce shoaling, consideration was given to both decreasing and increasing the supply of water to the cove. Less flow would reduce the supply of suspended materials and thus the total volume of shoaling. However, the effects on environmental conditions (stagnant water, reduced tidal range, and altered salinity) would be adverse. Local boating would also be affected by high velocities during peak flows through all openings to the river. Local interests totally rejected the idea of reducing flow into the area.

2.3. Further consideration of plans on the model involved methods to increase and direct flow through the cove. Of the initial **30 plans** observed visually on the model, those that obviously did not contribute to improving flow were discarded leaving about **20 plans**. Overhead time-lapse photography provided a better visual picture of surface current patterns enabling further reductions to the **six most efficient plans**. Preliminary economic and environmental analysis indicated **three** of those plans would be worthy of further detailed considerations. In addition to the three plans for improving flow, a plan for improving navigation through the cove was also included for detailed consideration to restore navigation access in the area. The overall best plan for flow and navigation

became apparent after detailed consideration of economic, social, and environmental factors."

2.4. A detailed description of the analysis of plans considered during the preliminary planning process is available on pages 16 - 30 of the *Jacksonville Harbor (Mill Cove) Feasibility Report* Volume 1 of 2 dated May 15, 1981. Additional details of the plan formulation process which reduced the 30 plans to 20, then six and finally three for further detailed consideration are contained in Appendix 2; Formulation, Assessment, and Evaluation of Detailed Plans of the above mentioned report. According to the Possible Solutions section of Appendix 2 on page A-3, alternatives were divided into two groups. The first involved an analysis of impacts in modifying the Dames Point-Fulton Cutoff to conditions that existed in the river before its construction. The second dealt with leaving the cutoff in place and seeking other modifications around Mill Cove to restore flow and navigation. Page A-8 illustrates that the Dames Point-Fulton Cutoff is a viable, essential improvement to the Jacksonville Harbor project. The excess benefits identified give a good indication of the economic impact and need for the cutoff. To restore conditions prior to the cutoff would impede ship movements and cause serious safety problems. To try and relocate the cutoff would involve the movement of industry, businesses, people, homes, transportation routes, and major utility services. The disruption in people's home and work environments would be considerable in addition to the natural processes that would be disturbed with filling and excavation. As a result, the investigation then turned to evaluating other alternatives that would improve flow and circulation in the Mill Cove.

2.5. The Corps of Engineers used a fixed bed hydraulic model, developed for the Mill Cove study of the lower St. Johns River, at the Waterways Experiment Station (WES) in Vicksburg, Mississippi, to test flow and circulation alternatives. The initial 30 plans observed visually on the model, those that obviously did not contribute to improving flow were discarded leaving about 20 plans. Overhead time-lapse photography provided a better visual picture of surface current patterns enabling further reductions to the six most efficient plans. Preliminary economic and environmental analysis indicated three of those plans would be worthy of further detailed considerations. The final plan consisted of a combination of two of those plans (plate 1). The final plan included enlarging the opening at both the east and west ends of Mill Cove, diversion features at both the east and west ends (Plate 1), and

the 6-foot deep by 80-foot wide channel connecting the two sets of diversion features (Figure 4).

2.6. The Board of Engineers for Rivers and Harbors recommended construction of the diversion features with the enlarged openings first with a monitoring period to assess the impact of those changes before constructing the 6-foot by 80-foot channel. After construction of the enlarged openings and diversion features in 1988, the monitoring period followed with hydrographic surveys about every six months through August 1993. The surveys indicated channelization starting to occur but not totally connecting each area of the cove (Figure 3). The flow improvement channel will connect those areas (Figure 4).

2.7. The Jacksonville Harbor plan C for the main Federal channel, with Mill Cove plan 5 in Technical Report CHL-97-8 of the September 1998, Final Feasibility Report and Environmental Impact Statement for the Jacksonville Harbor Navigation Study is not one of the 30 plans mentioned above in paragraphs 2.3 to 2.5.

2.8. The Numerical Modeling Study (Technical Report CHL-97-8) contained within the September 1998 Final Feasibility Report and Environmental Impact Statement for the Jacksonville Harbor Navigation Study tested plan C with Mill Cove plan 5. The only part of the Mill Cove plan 5 that is similar to the flow improvement channel of the EA is the channel alignment and dimensions. The other features of the Mill Cove plan 5 were developed in conjunction with the Jacksonville Harbor plan C which required expansion of Bartram Island. As shown in figure A14 of Technical Report CHL-97-8, three segments of Bartram (Quarantine) Island were extended to deflect the flows southward to existing deeper depths. The west end of Bartram Island was expanded to connect with an existing diversion feature commonly known as "No Name" island. The center section of Bartram Island was extended to connect with William Island. The east end of Bartram Island connected the existing east diversion feature to Marion Island. The north part of the cove was made shallower in the model by gradually decreasing the depth between the circulation channel and the northern coastline. In general the depths at the north part of the cove were less than 3 feet mean lower low water. Plan C with the Mill Cove plan 5 alternative was discarded during the Jacksonville Harbor evaluation when the benefit analysis did not support the additional depths which produced the additional quantities requiring the expansion of Bartram Island.

3.0. Existing Conditions. The Mill Cove area consists basically of tidal waters, wetlands, and uplands. As part of the St. Johns River system and the city of Jacksonville, the environment in the Mill Cove area is heavily influenced by natural forces and human activities within the area.

3.1. The St. Johns River has a controlling influence over water functions and conditions within Mill Cove. Tidal action in the river extends into Mill Cove through existing openings on the east and west ends with tidal varying from 1.2 to 3.8 feet with an average of about 2.9 feet. The major tidal exchange occurs through the openings on the west end. These openings enable water to flow east as far as Marion Island before stopping. The smaller, man-made opening on the cove's east end provides for tidal exchange of water only in the eastern third of Mill Cove. Such a condition enables no predominance of flow through the cove and enhances the settlement of suspended solids that enter the area from surface flows from the river. Shoaling data on Mill Cove indicate that most of the sediments probably entered the cove during periods of high concentrations of suspended solids in the surface waters of the river. Such conditions would have occurred during dredging and filling work in the harbor around Mill Cove.

3.2. Mill Cove constitutes a valuable environmental resource. Salt marsh occurs in numerous locations in the cove totaling many hundreds of acres. The marsh is primarily cordgrass with needlerush at higher elevations. Mill Cove also serves as a nursery area for numerous fish and shellfish and has high biological productivity.

3.3. Threatened and Endangered Species. The Corps and FWS have identified the bald eagle, wood stork and manatee as possibly occurring in the project area and the Corps and National Marine Fisheries Service (NMFS) have identified the shortnose sturgeon as possibly occurring in the project area. There is no designated critical habitat in the area.

3.4. Essential Fish Habitat (Magnuson-Stevens Fishery Conservation and Management Act). Coordination of this EA constitutes initial consultation with the NMFS under provisions of the Magnuson-Stevens Fishery Conservation and Management Act relative to Essential Fish Habitat (EFH) effects resulting from construction activities associated with the Mill Cove circulation channel. Based on analyses discussed in this EA and acute and cumulative effects on EFH resulting from the addition of the proposed project features are expected to be negligible.

3.5. Recreation. Recreational developments along the shoreline are water-oriented to different degrees with various activities dependent on water access. Three boat ramps are located in Mill Cove; the Jacksonville Outboard Club, the YMCA and a public boat ramp. Recreational activities in Mill Cove include boating, fishing and water skiing. Mill Cove is not, however, considered a high-use area because of shoaling and boating restrictions at low tide.

3.6. Water Quality. Waters of the St. Johns River, including Mill Cove, are classified as Class III by the State of Florida. Sediment sampling for the Mill Cove area occurred during preparation of the EIS for the *Jacksonville Harbor (Mill Cove) Feasibility Report* Volume 1 of 2 dated May 15, 1981. See Appendix 8, Attachment C, Water-Sediment Quality Analyses of that report for results. A tier one evaluation will consider results of the information provided in the past. Currently the sediment in Mill Cove is not considered to be significantly different than the material in the main channel. Recent sediment testing included in the *Final Environmental Impact Statement for Jacksonville Harbor* dated September 1998 indicated material in the main channel both upstream and downstream near the Mill Cove area was suitable for unlimited disposal.

3.7. Cultural Resources. A Submerged Historic Properties Survey conducted in 1997 indicated the existence of two anomalies in Mill Cove which were potentially historic. These anomalies have been examined in further detail and determined to be not significant.

4.00. Environmental Impacts.

4.01. No Action Alternative. Taking no action would allow the continued accumulation of sediments in Mill cove, resulting in less water flow and shallower depths. This process would result in an increase in marsh creation, decreased recreational use, less commercial fishery activity and reduction in aesthetic vistas as open water gradually becomes marsh.

4.02. Construction of Circulation Channel. Construction of the circulation channel is expected to result in enhanced flows through Mill cove and reduction of sedimentation in the channel, and to a lesser degree, adjacent areas of Mill cove. Water flow and circulation improvements throughout other parts of Mill Cove may also benefit a proposed Section 1135 habitat Restoration Project involving large-scale plantings of emergent aquatic

vegetation and maritime forest along a large portion of the northern part of Mill Cove by improving flows and tidal exchange through those areas. This proposal is only in the Reconnaissance phase at this time but could ultimately benefit large portions of Mill Cove in areas away from the immediate channel. Boating access will be improved throughout the length of the channel as well. Material dredged from the channel will be placed in the west end of Bartram Island, a previously-used upland disposal site.

4.03. Threatened and Endangered Species. The FWS and Corps identified the manatee, bald eagle and wood stork as occurring in the project area. Field investigations by the FWS determined that no bald eagle nests are located within the influence of project. Wood storks may feed in shallow water habitat associated with Mill Cove, but any disturbance of these birds will be temporary. Manatees commonly occur in the St. Johns River, and in Mill Cove where and when water depths exceed three feet. Because manatees may be present within the proposed footprint during the proposed dredging, the Corps will include standard manatee safety precautions in any contract specifications. The FWS has recommended that, if possible, the work be performed during the winter months, December through February, when manatees are less likely to be present.

4.04. In a letter dated September 27, 2000 the FWS expressed concerns regarding construction of a channel that would attract both boaters and manatees and increase the potential for boat-manatee collisions. Portions of Mill Cove within 300 feet of the southern shoreline are now designated as a slow speed-minimum wake zone. Based on further coordination with the FWS, the entire length and width of the proposed circulation channel, including a liberal perimeter to include possible meandering of the channel will be designated a slow speed zone and adequate signage will be posted.

4.05 Cultural Resources: A Submerged Historic Properties Survey conducted in 1997 indicated the existence of two anomalies in Mill Cove which were potentially historic. These anomalies have been examined in further detail and were determined to be not significant.

4.06. Water Quality. Dredging will cause temporary turbidity; however, State Water Quality Certification will be obtained and applicable State Water standards will be met at all times during construction. The project will ultimately improve flow and circulation in Mill Cove.

4.07. Aesthetic Resources. Dredging and associated equipment working at the site would be unsightly but will be removed upon completion of the work; therefore, any aesthetic impacts will be temporary.

5.0. Coordination. The proposed action was included as an alternative in a scoping letter for the Jacksonville Harbor Deepening project dated August 24, 1993. Coordination was initiated with the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) under Section 7 of the Endangered Species Act on 24 August 1993 and 23 April 1996, respectively. The proposed action was coordinated with the FWS under the Fish and Wildlife Coordination Act on October 19, 1993 for the Reconnaissance Phase of the study and again for the Feasibility Phase of the study. The Final CAR, including Mill Cove, was received November 30, 1997. The Feasibility Report and Draft EIS for the Jacksonville Harbor Deepening project was coordinated appropriated Federal, State, and local agencies and other interested parties, including the Fish and Wildlife Service, National Marine Fisheries Service. U.S.E.P.A., Florida State Clearinghouse and the State Historic Preservation Officer.

5.1. The Environmental Assessment for the Mill Cove circulation channel will be coordinated with appropriate Federal, State and local agencies and individuals, in a manner similar to that for the Jacksonville Harbor EIS.

5.2. Magnuson-Stevens Fishery Conservation and Management Act. Coordination of this EA constitutes initial consultation with the NMFS under provisions of the Magnuson-Stevens Fishery Conservation and Management Act relative to Essential Fish Habitat (EFH) effects resulting from. Construction activities associated with the Jacksonville Harbor GRR. Based on analyses discussed in this EA and acute and cumulative effects on EFH resulting from the addition of the proposed project features are expected to be negligible.

6.0. Environmental Commitments: In their July 23, 1997 Fish and Wildlife Coordination Act Report for the Jacksonville Harbor Deepening project which included the Mill Cove circulation channel, the FWS listed several Reasonable and Prudent Measures to protect listed species. The U.S. Army Corps of Engineers and contractors commit to avoiding, minimizing or mitigating for adverse effects during construction activities by including those measures in the contract specifications. There are no listed species under the jurisdiction of the NMFS that would be

affected by the project. The requirements of a Water Quality Certification from the State would be applied to the project. The entire circulation channel including a liberal perimeter to include areas of possible meandering of the channel would be designated a slow speed zone and marked with appropriate signage.

APPENDIX A
SECTION 404 (b) EVALUATION REPORT
MILL COVE CIRCULATION CHANNEL
DUVAL COUNTY, FLORIDA

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SECTION 404 (b) EVALUATION REPORT
MILL COVE CIRCULATION CHANNEL
DUVAL COUNTY, FLORIDA

I. Project Description.

a. Project Location. The site of the proposed activity is Mill Cove, in Jacksonville Harbor, Duval County, Florida.

b. General Project Description . The Corps proposes to construct a circulation channel 6 feet deep and 80 feet in width through Mill Cove. The material from the dredging activities will be placed in the west end of Bartram Island, a previously-used upland disposal site.

c. Authority and Purpose. The proposed action was authorized under Section 317 of the Water Resources Development Act of 1996 (WRDA 96) which modified the project for navigation, Jacksonville Harbor (Mill Cove), Florida, and directed the Secretary to carry out a project for mitigation, consisting of measures for flow and circulation improvement within Mill cove.

d. General Description of Dredged or Fill Material. The dredged material is shell, sand, silt and clay.

e. Quantity of Material. Approximately 600,000 cubic yards of material will be dredged.

II. Factual Determinations.

a. Physical Substrate Determinations.

(1). Substrate Elevation and Slope. The depths in the vicinity of the proposed circulation channel is less than 6 feet.

(2). Sediment Type. Sediments in the area are various combinations of sand, sand/shell, silt, and clay.

(3). Dredge/Fill Material Movement. The material will be placed in a diked upland disposal area.

(4). Physical Effect on Benthos. Benthic organisms will be destroyed by dredging but rapid repopulation is expected.

b. Water Circulation, Fluctuation and Salinity Determination.

(1). Water Column Effects. Circulation will be increased by constructing the project; therefore, the water column will be altered.

(2). Current Patterns and Circulation. Current patterns and water circulation in the area will be increased.

(3). Normal Water Level Fluctuations and Salinity Gradients. Little or no affect expected.

c. Suspended Particulate/Turbidity Determinations.

(1). Expected Changes in Suspended Particulates and Turbidity Levels in the Vicinity of the Disposal Site. Project activities may cause temporary increases in turbidity levels at the site but effects will be short-term and minor.

(2). Effects on the Chemical and Physical Properties of the Water Column.

(a). Light Penetration. Light penetration may decrease slightly during construction but because of the high energy levels caused by tides and currents will cause such any changes to be minor and short-term.

(b). Dissolved Oxygen. Dissolved oxygen levels will not be altered by project activities.

(c). Toxic Metals, Organics and Pathogens. No such elements are expected at the site.

(d). Aesthetics. The presence of heavy equipment at the site during construction will be unsightly; however, upon cessation of activities, the equipment will be removed and the site will appear as before.

(3). Effects on Biota.

(a). Primary Productivity. Because of the nature of tides and currents at the construction site, project effects on primary productivity are expected to be minimal.

(b). Suspension/Filter Feeders. Because of the relatively high energy nature of the construction site, no adverse impacts on suspension or filter feeders is expected.

(c). Sight Feeders. No adverse impacts are expected.

d. Contaminant Determinations. No adverse impacts expected as the material will be disposed of in a previously used upland disposal site. The material to be dredged is not expected to contain contaminants above threshold amounts requiring further testing. The upland disposal site has been previously investigated.

e. Aquatic Ecosystem and Organism Determinations.

(1). Effects on Plankton. No adverse impacts to autotrophic or heterotrophic organisms are expected.

(2). Effects on Benthos. There will be mortality of benthos at the dredge site.

(3). Effects on Nekton. No adverse impacts are expected.

(4). Effects on Aquatic Food Web. No long-term adverse impacts are expected.

(5). Effects on Special Aquatic Sites.

(a). Hardground and Coral Reef Communities. No such communities occur in the project area.

(b). Wetlands. Wetlands will not be adversely affected by the project. Increased circulation and tidal flushing will enhance the surrounding wetland areas.

(6). Threatened or Endangered Species. The proposed action has been coordinated with the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) under the Endangered Species Act for the Jacksonville Harbor Deepening project, which included Mill Cove as an alternative. Both agencies have concurred with the Corps determination of no effect for Threatened or Endangered Species. The circulation channel will be made a slow speed zone and posted with adequate signage.

(7). Other Wildlife. Project effects on other wildlife is expected to be minimal.

(8). Actions to Minimize Impacts. All practical safeguards will be taken during construction to preserve and enhance environmental, aesthetic, recreational, cultural, historic and economic values in the project area.

f. Proposed Disposal Site Determinations.

(1). Determination of Compliance with Applicable State Water Quality Standards. Construction activities will be monitored to ensure that State Water Quality Standards are met at all times during construction and Class III water quality standards will not be exceeded.

(2). Potential Effects on Human Use Characteristics.

(a). Municipal and Private Water Supplies. No municipal or private water supply systems will be impacted by construction of the project.

(b). Recreational and Commercial Fisheries. Recreational and/or commercial fisheries activities will not be affected by the project except in the immediate vicinity of construction activities and any such impacts will be temporary and minor.

(c). Water-Related Recreation. Water-related recreation activities will not be affected by project activities except in the immediate vicinity of construction, and will be short-term and minor.

(d). Aesthetics. The presence of construction equipment at the site during construction will be aesthetically displeasing but upon completion of the project and subsequent removal of the equipment the area will revert to pre-project conditions.

(e). Parks, National and Historic Monuments, National Seashores, Wilderness Areas, Research Sites and Similar Preserves. A Submerged Historic Properties Survey conducted in 1997 indicated the existence of two cultural resources anomalies in Mill Cove. These anomalies will be examined in further detail prior to initiation of construction activities.

III. Cumulative Impacts.

a. Determination of Cumulative Effects on the Aquatic Ecosystem. There will be no cumulative impacts that result in significant degradation of water quality as a result of project activities. The proposed action would partly counteract adverse affects to flow and circulation resulting from the construction of the Dames Point-Fulton Cutoff and Bartram Island.

b. Determination of Secondary effects on the Aquatic Ecosystem. Circulation and flow will be improved which will improve the overall health of the aquatic community in Mill Cove. A secondary positive impact will be to enhance water access to public and private docking and boat launch facilities in the area.

III. Findings of Compliance or Non-Compliance with the Restrictions on Discharge.

a. No significant adaptations of the guidelines were made relative to this evaluation.

b. No practicable alternative exists which meets the study objectives that does not involve discharge of fill into waters of the United States.

c. After consideration of disposal site dilution and dispersion, the determination was made that the discharge of fill materials will not cause, or contribute to, violations of any applicable State water quality standards for Class III waters. Discharge operations will not violate the Toxic Effluent Standards of Section 307 of the Clean Water Act.

d. Project activities will not jeopardize the continued existence of any species listed as Threatened or Endangered or result in the likelihood of destruction or adverse

modification of any critical habitat as specified under the Endangered Species Act of 1973, as amended.

e. The placement of fill material will not result in significant impacts to human health or welfare, including municipal and/or private water supplies, recreational or commercial fisheries, plankton, fish, shellfish, wildlife or special aquatic sites. The life stages of aquatic or other wildlife species will not be adversely affected. Significant adverse impacts to aquatic ecosystem diversity, productivity and stability, and recreational, aesthetic and economic values will not occur.

f. On the basis of these guidelines, the proposed actions are specified as complying with the requirements of the guidelines.

APPENDIX B
MILL COVE CIRCULATION CHANNEL
FLORIDA COASTAL ZONE CONSISTENCY PROGRAM
FEDERAL CONSISTENCY EVALUATION PROCEDURE

APPENDIX B
MILL COVE CIRCULATION CHANNEL
FLORIDA COASTAL ZONE CONSISTENCY PROGRAM
FEDERAL CONSISTENCY EVALUATION PROCEDURE

1. Chapter 161 F.S., Beach and Shore Preservation: The intent of the coastal construction permit program established by this chapter is to regulate construction projects located seaward of the line of mean high water and which might have an effect on natural shoreline processes.

Consistency Statement: The proposed action will have no effect on natural shoreline processes and is consistent with the intent of this chapter

2. Chapters 186 and 187 F.S., State and Regional Planning. These chapters establish the State Comprehensive Plan which sets goals and policies that articulate a strategic vision of the State's future. It's purpose is to define in a broad sense. goals and policies that provide decision-maker's direction for the future and long-range guidance for orderly, economic and physical growth.

Consistency Statement: The proposed action will be consistent with the intent of these chapters.

3. Chapter 252 F.S., Disaster Preparation, Response and Mitigation. This chapter creates a State Emergency Management Agency, with authority to provide for the common defense; to protect the public peace, health and safety; and to preserve and protect the lives and property of the people of Florida.

Consistency Statement: The proposed action will be consistent with the intent of this chapter.

4. Chapter 253 F.S., State Lands. This chapter governs the management of submerged State lands and resources within State lands. This includes archeological and historical resources; water resources; fish and wildlife resources; beaches and dunes; submerged grass beds and other benthic communities; swamps, marshes and other wetlands; mineral resources; unique natural features; submerged lands; disposal islands; and artificial reefs.

Consistency Statement: Channel construction and maintenance activities have previously been performed in Jacksonville Harbor and the use of these State lands has previously been approved by the State. The proposed activity has been coordinated with the State and appropriate State permits will be obtained. The Corps is coordinating the proposed action with the State Historic Preservation Officer with respect to diver investigations of potentially significant magnetic anomalies. The proposed action will be consistent with the intent of this chapter.

5. Chapters 253, 259, 260 and 375 F.S., Land Acquisition: These chapters authorize the State to acquire land and protect environmentally sensitive areas.

Consistency Statement: As the property is already in public ownership, these chapters do not apply.

6. Chapter 258, F.S. State Parks and Aquatic Preserves: This chapter authorizes the State to manage State parks and preserves. Consistency with this chapter would include consideration of projects that would directly or indirectly adversely impact park property, natural resources, park programs or management or operation.

Consistency Statement: The proposed action will not affect State parks or preserves, and is consistent with the intent of this chapter.

7. Chapter 267 F.S., Historic Preservation. This chapter establishes the procedures for implementing the Florida Historic Resources Act responsibilities.

Consistency Statement: A magnetometer survey of the project area was conducted and two anomalies were detected. Archeological divers will be contracted to dive the site to determine if these anomalies have significance. The proposed action is being coordinated with the State Historic Preservation Officer and will be consistent with this chapter.

8. Chapter 288 F.S., Economic Development and Tourism. This chapter directs the State to provide guidance and promotion of beneficial development through the encouragement of economic diversification and promotion of tourism

Consistency Statement: The proposed action will be consistent with the intent of this chapter.

9. Chapters 334 and 339 F.S. , Public Transportation. This chapter authorizes the planning and development of a safe and efficient public transportation system.

Consistency Statement: The proposed action will not affect public transportation; therefore, these chapters do not apply.

10. Chapter 370 F.S., Living Saltwater Resources. This chapter directs the State to preserve, manage and protect the marine, crustacean, shell and anadromous fishery resources in State waters; to protect and enhance the marine and estuarine environment; to regulate fishermen and vessels of the State engaged in the taking of such resources within or without State waters; to issue licenses for the taking and processing of fisheries products; to secure and maintain statistical records of the catch of each species; and to conduct scientific, economic and other studies and research.

Consistency Statement: Construction of the circulation channel will enhance the estuarine environment and is consistent with the intent of this chapter.

11. Chapter 372 F.S., Living Land and Freshwater Resources. This chapter establishes the Game and Freshwater Fisheries Commission and directs it to manage freshwater aquatic life and wild animal life and their habitat to perpetuate a diversity of species with densities and distributions which provide sustained ecological, recreational, educational, aesthetic and economic benefits.

Consistency Statement: Living land and freshwater resources will be enhanced by the proposed action and is consistent with the intent of this chapter.

12. Chapter 373 F.S., Water Resources. This chapter provides the authority to regulate the withdrawal, diversion, storage and consumption of water.

Consistency Statement: This chapter does not apply.

13. Chapter 376 F.S., Pollutant Spill Prevention and Control. This chapter regulates the transfer, storage and transportation of pollutants and the cleanup of pollutant discharges.

Consistency Statement: The proposed action does not involve the transportation or discharge of pollutants. Conditions will be placed in the contract plans and specifications to handle inadvertent spills of pollutants such as vessel fuels. The proposed action will comply with this chapter.

14. Chapter 377 F.S., Oil and Gas Exploration and Production. This chapter authorizes the regulation of all phases of exploration, drilling and production of oil, gas and other petroleum products.

Consistency Statement: This chapter is not applicable.

15. Chapter 380 F.S., Environmental Land and Water Management. This chapter establishes criteria and procedures to assure that local land development decisions consider the regional impact of large-scale development.

Consistency Statement: The proposed action will be consistent with the intent of this chapter.

16. Chapter 388 F.S., Arthropod Control. This chapter provides for a comprehensive approach for abatement or suppression of mosquitoes and other arthropod pests within the State.

Consistency Statement: The project would not result in stagnant pools or other mosquito breeding areas and will be consistent with the intent of this chapter.

17. Chapter 403 F.S., Environmental Control. This chapter authorizes the regulation of pollution of the air and waters of the State by the Department of Environmental Protection.

Consistency Statement: Appropriate State permits will be obtained for the proposed action.

18. Chapter 582 F.S., Soil and Water Conservation. This chapter establishes policy for the conservation of State soil and water through the Department of Agriculture. Land use policies will be evaluated in terms of their tendency to cause or contribute to soil erosion or to conserve, develop and utilize soil and water resources both on-site or on adjacent properties affected by the work. Particular attention will be given to work on or near agricultural lands.

Consistency Statement: This chapter is not applicable.

FINDING OF NO SIGNIFICANT IMPACT
MILL COVE CIRCULATION CHANNEL

I have reviewed the planning document and the Environmental Assessment (EA) for the proposed action. This finding incorporates by reference all discussions and conclusions contained in the Environmental Assessment attached hereto. Based on information analyzed in the EA, reflecting pertinent information obtained from cooperating Federal agencies having jurisdiction by law and/or special expertise, I conclude that the proposed action will have no significant impact on the quality of the human environment. Reasons for this conclusion are, in summary:

- a. There will be no significant impact on threatened or endangered species or sites of cultural or historic significance.
- b. The circulation channel will be made a slow speed zone and posted with adequate signage.
- c. Water quality standards will be met.
- d. Measures to eliminate, reduce or avoid potential adverse impacts to fish and wildlife resources will be implemented during project construction.

In consideration of the information summarized, I find that the proposed action will not significantly affect the human environment and does not require an Environmental Impact Statement.

27 Apr 01
Date

SIGNED: Christopher P. Boruch

JAMES G. MAY
Colonel, U.S. Army
District Engineer

Christopher P. Boruch
Lieutenant Colonel, U.S. Army
Deputy District Engineer

RM Boothby/CESAJ-PD-EA/3453/*als* 4-12-01
BO McAdams/CESAJ-PD-EA
BO Dugger/CESAJ-PD-E
BO Smith/CESAJ-PD-E
JP Schmidt/CESAJ-PD-PN
JP Scarborough/CESAJ-DP-I
JP Strain/CESAJ-PD-P
JP Mack/CESAJ-PD
JP Burns/CESAJ-CESAJ-DX
JP Boruch/CESAJ-DD
JP May/CESAJ-DE

L: group/pde/boothby/Mill Cove Circ. Ch. EA